AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

1 (Currently amended). In an IP-based Code Division Multiple Access (CDMA) cellular telecommunications network, a method for handing-off a dormant Mobile Node (MN) to a target packet zone having a Packet Data Service Node (PDSN) and a Base Station Controller with a Packet Control Function (BSC/PCF), the method comprising the steps of:

transmitting from the dormant MN to the BSC/PCF an origination request message comprising an indication that the MN is dormant;

responsive to a receipt of the origination request, sending from the BSC/PCF to the PDSN a registration request message, the registration request comprising an indication of an identity of the MN and an indication that the MN is dormant;

transmitting from the PDSN to the BSC/PCF a registration reply ~~for requesting an establishment of a traffic channel between the BSC/PCF and the MN~~, the registration reply comprising an indication for requesting the BSC/PCF to set up a traffic channel between the BSC/PCF and the MN and for informing the BSC/PCF that the PDSN has packet data ready to be sent to the MN;

responsive to a receipt of the registration reply by the BSC/PCF, establishing a traffic channel between the BSC/PCF and the MN.

2 (Original). The method claimed in claim 2, wherein the step of establishing a traffic channel between the BSC/PCF and the MN is performed responsive to a detection of the indication that the PDSN has packet data ready to be sent to the MN.

3 (Original). The method claimed in claim 2, wherein the indication that the PDSN has packet data ready to be sent to the MN is one of a Data Ready to Sent (DRS) parameter set to a value of 1, and a Data Available Indicator.

4 (Original). The method claimed in claim 1 further comprising the step of:

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establishing a Point-to-Point Protocol (PPP) connection between the PDSN and the MN.

5 (Original). The method claimed in claim 1, further comprising after the step of sending from the BSC/PCF to the PDSN a registration request message, and prior to the step of transmitting from the PDSN to the BSC/PCF a registration reply, the step of:

upon receipt of the registration request message, detecting that there is no Point-to-Point (PPP) connection set up between the PDSN and the MN.

6 (Original). The method claimed in claim 1, further comprising following the establishment of the traffic channel, the step of reporting to a Mobile Switching Center (MSC) the establishment of the traffic channel.

7 (Original). The method claimed in claim 1 further comprising, following the receipt of the Registration message by the PDSN, the step of:

sending Link Control Protocol (LCP) data packets from the PDSN to the BSC/PCF for the negotiation of a PPP connection.

8 (Original). The method claimed in claim 7 further comprising following the step of sending the LCP data packets, the step of:

sending the LCP data packets from the BSC/PCF to the MN.

9 (Original). The method claimed in claim 1, wherein:

the origination request message comprises an indication that the MN is dormant and an indication of an identity of the MN;

the registration request message is an A-11 registration request message and comprises the indication that the MN is dormant and the indication of the identity of the MN; and

the registration reply message is an A-11 registration reply message and comprises an indication that the PDSN has data to be sent to the MN.

10 (Original). The method claimed in claim 9, wherein:

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the indication that the MN is dormant is a Data Ready to Send (DRS) parameter set to a value of 0 (DRS=0) and the indication of the identity of the MN is an International Mobile Station Identification Parameter (IMSI); and

the indication that the PDSN has data to be sent to the MN is a Data Ready to Send (DRS) parameter set to a value of 1 (DRS=1).

11 (Original). The method claimed in claim 1 wherein the IP-based Code Division Multiple Access (CDMA) cellular telecommunications network is a CDMA 2000 cellular network.

12 (Currently amended). An IP-based Code Division Multiple Access (CDMA) cellular telecommunications system comprising:

a target packet zone to which a dormant Mobile Node (MN) is being handed-off from a source packet zone, the target packet zone comprising:

a Base Station Controller having a Packet Control Function (BSC/PCF), the BSC/PCF receiving an origination request message from the dormant MN during the hand-off; and

a Packet Data Service Node (PDSN) receiving from the BSC/PCF a registration request for requesting packet data service provision, the registration request comprising an identification of the MN and an indication that the MN is dormant;

wherein responsive to the receipt of the registration request message, the PDSN sends a registration reply message to the BSC/PCF ~~for requesting an establishment of a traffic channel between the BSC/PCF and the MN~~, the registration reply comprising an indication for requesting the BSC/PCF to set up a traffic channel between the BSC/PCF and the MN and for informing the BSC/PCF that the PDSN has packet data ready to be sent to the MN.

13 (Original). The IP-based CDMA cellular telecommunications system claimed in claim 12, wherein responsive to the receipt of the registration reply message, the BSC/PCF establishes a traffic channel with the MN.

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14 (Original). The IP-based CDMA cellular telecommunications system claimed in claim 13, wherein following the establishment of the traffic channel, the BSC/PCF sends a Registration message to the PDSN for reporting the successful establishment of the traffic channel.

15 (Original). The IP-based CDMA cellular telecommunications system claimed in claim 14, wherein following the receipt of the Registration message, the PDSN sends to the BSC/PCF Link Control Protocol (LCP) data packets for the negotiation of a PPP connection.

16 (Original). The IP-based CDMA cellular telecommunications system claimed in claim 15, wherein the BSC/PCF sends the LCP data packets to the MN.

17 (Currently amended). The IP-based CDMA cellular telecommunications system claimed in claim 12, wherein:

the origination request message comprises an indication that the MN is dormant and an indication of an identity of the MN; and

the registration request message is an A-11 registration request message and comprises the indication that the MN is dormant and the indication of the identity of the MN~~; and~~

~~the registration reply message is an A-11 registration reply message and comprises an indication that the PDSN has data to be sent to the MN~~.

18 (Original). The IP-based CDMA cellular telecommunications system claimed in claim 17, wherein:

the indication that the MN is dormant is a Data Ready to Send (DRS) parameter set to a value of 0 (DRS=0) and the indication of the identity of the MN is an International Mobile Station Identification Parameter (IMSI); and

the indication that the PDSN has data to be sent to the MN is one of a Data Ready to Send (DRS) parameter set to a value of 1 (DRS=1), and a Data Available Indicator.

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19 (Original). The IP-based CDMA cellular telecommunications system claimed in claim 12, wherein the IP-based Code Division Multiple Access (CDMA) cellular telecommunications system is a CDMA 2000 cellular network.

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